MIAMI-SOUTH FLORIDA
National Weather Service
Forecast Office
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NORMAL TO ABOVE NORMAL RAINS IN AUGUST END DROUGHT OVER MOST OF SOUTHWEST FLORIDA

MODERATE DROUGHT CONTINUES OVER PARTS OF SOUTHEAST FLORIDA

For the second consecutive month, south Florida rainfall was mostly near to above the monthly normal (Fig 1). August rainfall patterns were primarily dominated by typical sea-breeze and diurnal effects, with plentiful atmospheric moisture and instability provided by a persistent trough of low pressure in the middle and upper troposphere (Fig 2). This led to a fairly wide distribution of rainfall across south Florida. The western fringes of Hurricane Irene produced rainfall amounts between 1 and 2 inches on August 25th over a large area from southeastern Palm Beach County to all of eastern Broward County and extreme northeastern Miami-Dade County. August featured significantly higher individual rainfall amounts than in past months, with at least 7 sites recording monthly rainfall in excess of 10 inches (see table below for list of stations). A few areas did remain below normal for the month, but these areas were limited to isolated areas along the southeast and southwest coasts, far southern Everglades and Lake Okeechobee.

Below are August 2011 rainfall totals at select sites across South Florida. Rainfall values are listed in inches.

AUGUST 2011 RAINFALL TOTALS/DEPARTURE FROM NORMAL IN INCHES

Station – *Beginning of Records*	August 2011	Dep. fm Normal
FORT LAUDERDALE – *1912*	6.38	-1.06
MIAMI – *1895*	11.08	+2.20
NAPLES – *1942*	7.97	-0.61
WEST PALM BEACH – *1888*	11.98	+4.03
MIAMI BEACH - *1927*	7.61	+1.24

MOORE HAVEN - *1918*	8.56	+0.99
MUSE	9.43	
BRIGHTON RESERVATION	4.34	
HOMESTEAD GENERAL APT	15.62	
THE REDLAND - *1958*	13.46	+3.76
NWS MIAMI – FIU MAIN	9.68	
HIALEAH	10.59	
JUNO BEACH	13.37	
NORTH MIAMI BEACH	8.59	
OASIS RANGER STATION	12.58	
PALM BEACH GARDENS	8.92	
MARCO ISLAND	12.05	
CAPE FLORIDA	6.50	
CANAL POINT - *1941*	7.05	-0.77
HOLLYWOOD - *1963*	7.64	-1.60
BIG CYPRESS RESERVATION	9.37	
IMMOKALEE	4.54	
FORT LAUDERDALE BEACH	9.45	
LOXAHATCHEE NWR	7.09	

NORMAL VALUES ARE THE 1981-2010 CLIMATIC AVERAGES, BUT ARE NOT AVAILABLE FOR ALL OBSERVING LOCATIONS.

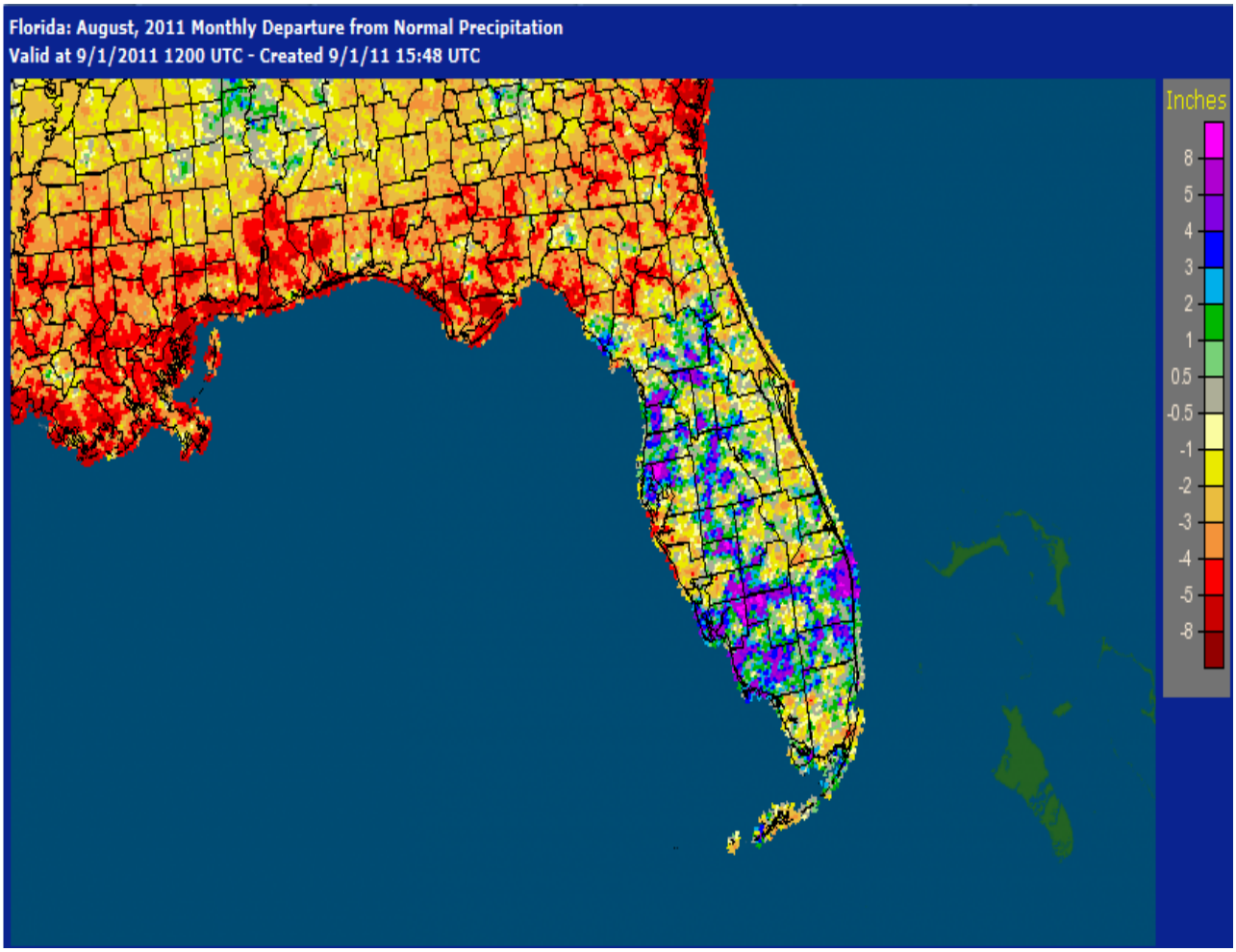

FIGURE 1: AUGUST PRECIPITATION DEPARTURE FROM NORMAL IN INCHES. YELLOW AND ORANGE AREAS DEPICT BELOW NORMAL PRECIPITATION, WHILE GREEN, BLUE AND MAGENTA COLORS DEPICT ABOVE NORMAL PRECIPITATION.

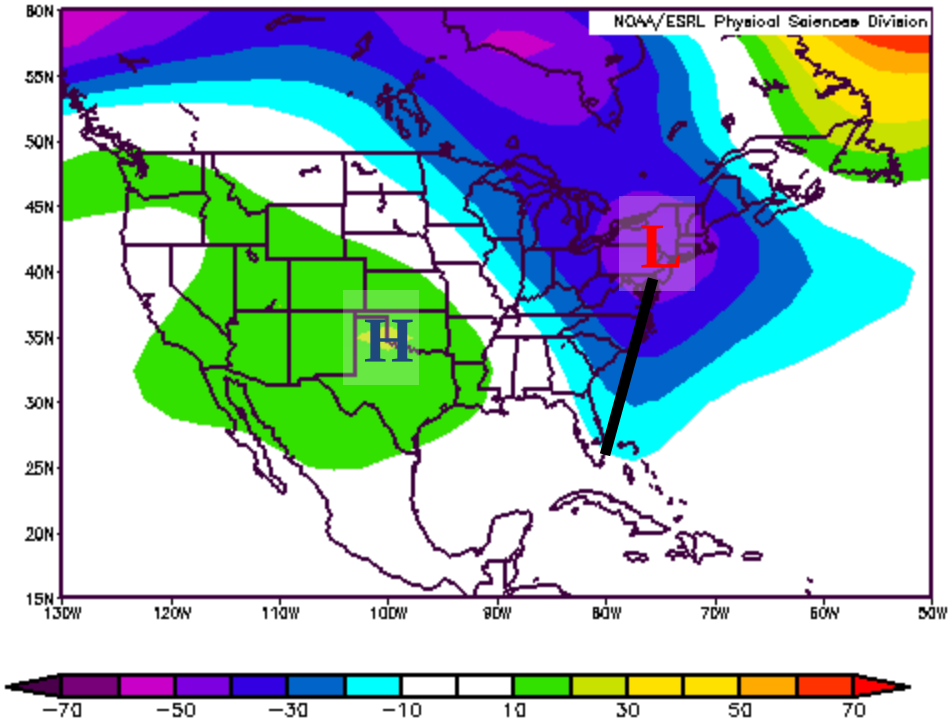

FIGURE 2: MID-ATMOSPHERIC (500 MB) HEIGHT ANOMALIES FROM AUGUST 1 THROUGH AUGUST 29. DOMINANT LOW PRESSURE FROM THE NORTHEAST U.S. TO FLORIDA AND NEARLY PERSISTENT HIGH PRESSURE OVER THE SOUTHERN PLAINS AND ROCKIES.

The increased August rains helped decrease or eliminate summer rainfall deficits in some areas. West Palm Beach's rainfall deficit since June 1 is now down to 0.09 inches and Miami's rainfall since June 1 is almost 4 inches above normal. On the other hand, Fort Lauderdale maintains a 10.63 inch deficit since June 1 and Naples' deficit for the same time period is 8.22 inches. Overall, 90-day rainfall deficits remain over much of Broward and Miami-Dade counties as well as Lake Okeechobee, with rainfall surpluses over most of the Everglades and Big Cypress, interior sections of southwest Florida and portions of Palm Beach County (Fig. 3)

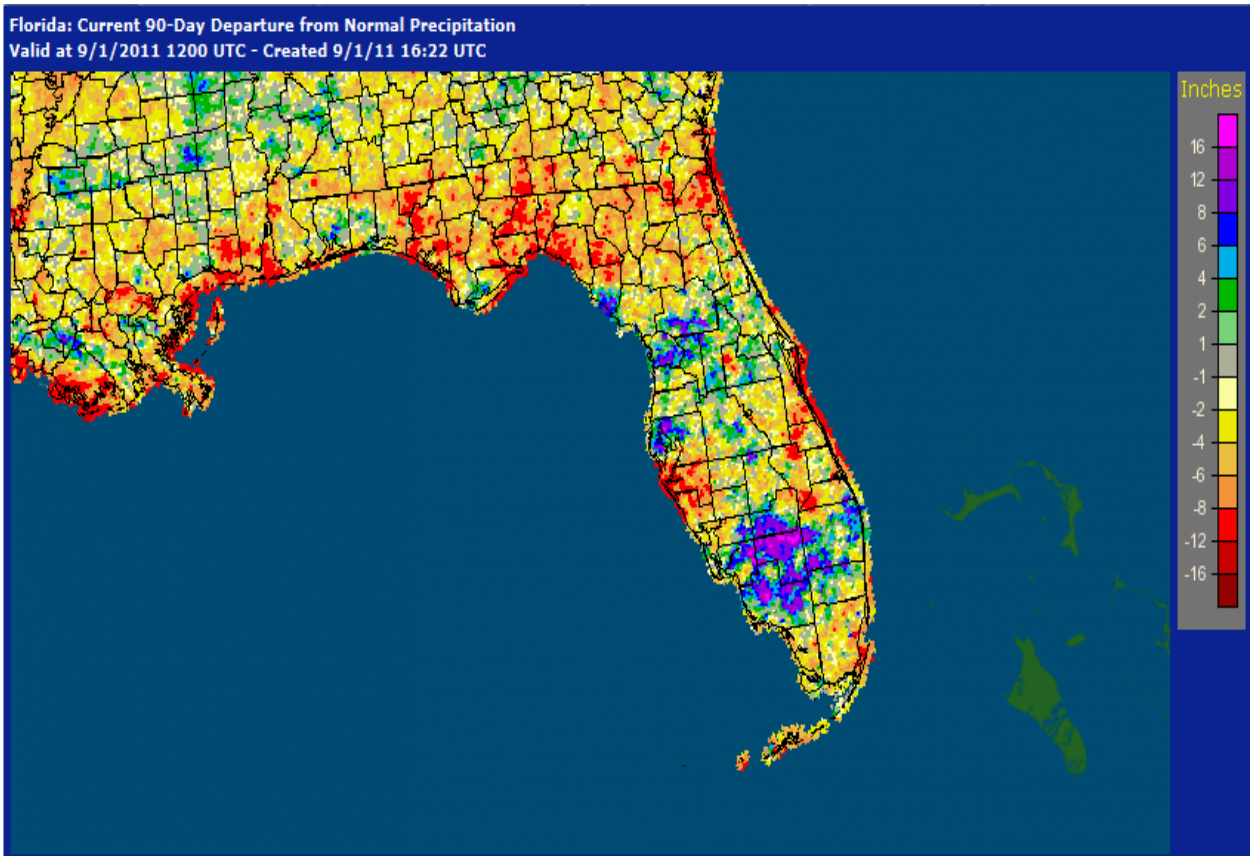

FIGURE 3: 90-DAY PRECIPITATION DEPARTURE FROM NORMAL IN INCHES (SINCE JUNE 3).

DROUGHT IMPACTS

Notable improvement in the drought conditions was noted over all of south Florida in August, with almost all of the area out of the severe drought category (Fig. 4). An area of moderate drought (D1) conditions extends from southern Palm Beach through Miami-Dade and mainland Monroe counties, with a small patch of moderate to severe (D2) drought conditions over Lake Okeechobee and adjacent northeastern Glades and northwestern Palm Beach counties. The remainder of Palm Beach and Broward counties is in the abnormally dry (D0) category, with southwest Florida from Collier to Hendry counties completely out of any abnormally dry or drought conditions. Relative dryness near and over Lake Okeechobee led to only a slight rise to between 10.5 and 11 feet above mean sea level by the end of August, which is still over 3 feet below normal.

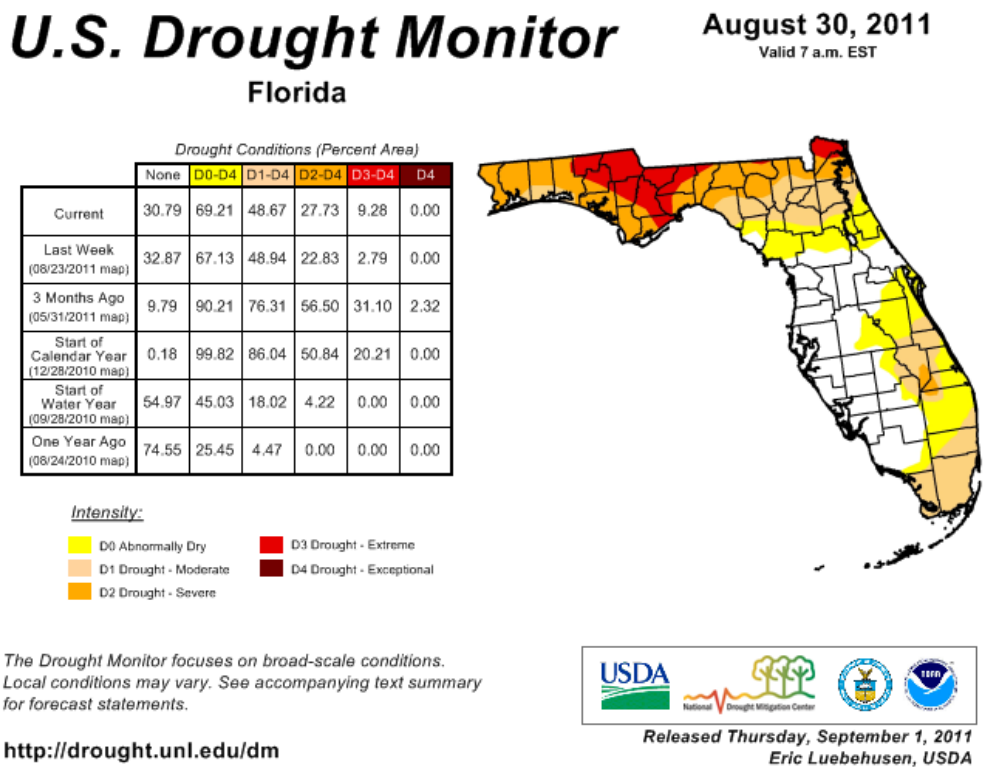

FIGURE 4: DROUGHT MONITOR AS OF AUGUST 30TH.

TEMPERATURES

An increase in clouds and rainfall kept temperatures near to slightly above normal during August. West Palm Beach was an exception with warmer than normal temperatures caused by prevailing westerly winds. Nevertheless, a long streak of 90-plus degree days ended at Miami and West Palm Beach on August 23rd. West Palm Beach's streak reached 46 days, the third longest on record, and Miami's streak hit 44 days which established a new record previous longest streak was 34 days set back in 1952).

- **West Palm Beach** recorded an average July temperature of 84.5 degrees. This is 1.5 degrees above normal and **is the 5th hottest August on record**. The highest temperature recorded for the month was 97 degrees on the 2nd.

- **Miami** recorded an average June temperature of 84.6 degrees. This is 0.4 degrees above normal. The highest temperature recorded for the month was 95 degrees on the 6th and 11th.

- **Naples** recorded an average July temperature of 83.5 degrees. This is 0.3 degrees above normal. The highest temperature recorded for the month was 95 degrees on the 21st.

- **Fort Lauderdale** recorded an average July temperature of 84.5 degrees. This is 0.1 degrees below normal. The highest temperature recorded for the month was 95 degrees on the 26th and 27th.

OUTLOOK AND HAZARDS

Long-range outlooks by the Climate Prediction Center (CPC) for September call for a continued likelihood of above normal precipitation due in large part to the expectation of a prevailing mid to upper level trough over the eastern United States, as well as any influence from tropical systems near our region. CPC is also calling for an increased likelihood of above normal temperatures in September, but confidence in the temperature outlook is quite low due to the possibility of increased cloudiness and rain keeping temperatures down. Looking forward to October, little change in the September outlook is expected, however October normally signals the end of the rainy season as well as the time of year when cold fronts being to approach South Florida. It must be emphasized, however, that long-range outlooks are **subject to large errors**.

September and October are historically the active as far as hurricanes in South Florida are concerned. During those two months, South Florida has been directly hit by a total of 34 hurricanes since the late 1800s. Therefore, NOW is the time to make sure personal and business hurricane plans are in place and that you and your families are ready this hurricane season. Go to ready.gov for information and preparedness checklists.

September and October are also prime months for rip currents. Always swim near a lifeguard and heed the advice of Ocean Rescue personnel. Pay attention to flags posted at lifeguard stands which alert of the potential rip current danger.

For daily weather forecasts, watches, warnings and statements, please visit our web site at weather.gov/southflorida. Also, please make sure to visit our Facebook page by clicking on this link.